While I may choose to file additional comments regarding some of the other points of this proceeding, I feel it especially necessary that this segment of my comments stands out to the Commission and thus will file it separately. Please excuse me if I should file additional comments prior to the end of the comment period.

I own and operate the popular digital television website RabbitEars.Info, and have closely tracked the FCC website since the middle of 2008. Seeing the extensive issues with VHF reception led me to create a page on the website called "VHF Nightmares" where I track all the stations which seek power increases, channel changes, or fill-in translators for their full-power VHF channels. This list is, unfortunately, very long, which is evidence of significant problems with the VHF band as utilized in digital television.

In addition to closely following FCC applications and approvals on a daily basis, I have had extensive communications with station engineers and others in the industry who have either worked for or with stations regarding these problems or have been in a market with these stations and experienced the issues first-hand. I have heard again and again that upper-VHF needs a significant power increase, and low-VHF should be written off entirely. From my first-hand experiences, I agree with both statements, particularly the one about eliminating low-VHF where possible. It is my continuing first-hand experiences with WBRA on channel 3 that gives me so much interest in these proceedings. Despite operating at the FCC power limit for its height and despite a large low-VHF roof antenna and amplifier at my location, the station's SNR is significantly lower than the other stations despite having a stronger received power level. From observations with a spectrum analyzer, this appears to be due to the presence of a noise floor that is about 20 dB higher on low-VHF than on both other television bands. I have attached snapshots from my spectrum analyzer to show this elevated noise floor. This does not even take into account the significant amounts of interference received from lightning and electrical devices, factors which, when present, make the WBRA signal completely useless.

One of the major points the FCC has made in this proceeding is that VHF power levels are too low. From my observations and experience, the FCC is exactly correct on this matter, but I feel that the rules proposed here do not go far enough. In the Notice for Proposed Rule Making, the Commission proposes to raise the VHF power levels by 6 dB in Zone I only. Since this is only a 6 dB increase over the existing power level, then if my interpretation is correct, the "sliding scale" above 305 meters remains in place. At current power levels, this means WABC's permit for operation from the new World Trade Center tower would be constrained to 22.48 kW regardless of interference conditions. Similarly, WPVI in Philadelphia, which is currently operating under STA at 30 kW and stated in proceeding 09-230 that it would require 48 kW for any hope of consistent coverage, would be constrained to only the 30 kW they have now.

In addition, this provides no benefit to stations outside of Zone I or to low-power stations. WCYB-5, WUOA-6, and KTVB-7 are just a few among many stations who are currently operating above height adjusted Zone II power limits in an attempt to make the VHF television bands work successfully for them. Similarly, several low VHF low-power stations including WOCK-CD, KCSO-LD, and K14MW-D have all sought permission to increase power beyond the current limits to help alleviate coverage issues they have experienced.

I feel the FCC should make the following changes in the power limits for VHF stations:

Rule	**Current**	**Proposed**
Low-VHF, Zone I Cap	305m 10 kW/610m 1 kW	305m 60 kW/610m 10 kW
Low-VHF, Zone II Cap	305m 45kW/610m 10 kW	305m 90 kW/610m 45 kW
Low-VHF, Low-Power Cap	0.3 kW	1.5 kW
High-VHF, Zone I Cap	305m 30 kW/610m 3 kW	305m 120 kW/610m 30 kW
High-VHF, Zone II Cap	305m 160 kW/610m 30 kW	305m 240 kW/610m 120 kW
High-VHF, Low-Power Cap	0.3 kW	3 kW

In addition, there would need to be adjustments to the sliding scales to make these numbers work out since the increases are not level.

Each of these changes can be easily justified given what can be observed from the current operating environment among VHF stations.

- The proposed Low VHF cap in Zone I is a 6 dB increase at the low end and a 10 dB increase at the high end. This is consistent with the 48 kW power level being sought by WPVI.
- The proposed Low VHF cap in Zone II is a 3 dB increase at the low end and a 6.5 dB increase at the high end. This is consistent with the power level already approved for WCYB.
- The proposed Low VHF cap on low-power stations is a 7 dB increase, providing additional flexibility to stations which have already discovered significant coverage deficits where increases above 0.3 kW, such as the 6 dB increase to 1.2 kW as applied for by KCSO-LD, may have already been encountered.
- The proposed High VHF cap in Zone I is a 6 dB increase at the low end and an 10 dB increase at the high end. This increase covers all stations already approved at higher power levels while allowing for additional flexibility in the event the existing increases are not enough. Interference concerns will likely provide a limit before this value does.
- The proposed High VHF cap in Zone II is a 1.7 dB increase at the low end and a 6 dB increase at the high end. This is consistent with the 62 kW power level already approved for use by KTVB in the past. It is not consistent with the significantly higher power levels currently utilized by KTTV or KCOP, but these stations are maximized under 47CFR73.622(f)(5).
- The proposed High VHF cap on low-power stations is a 10 dB increase. This increase acknowledges the power difference required for equivalent coverage between low and high VHF while also providing a power increase to overcome coverage deficits discovered since these stations first signed on digitally. The FCC has already approved power levels up to 10 dB higher than the current limit for some high VHF low-power stations, including W07BN-D at 3 kW, K07DQ-D at 3 kW, K08MM-D at 2.06 kW, K08IO-D at 1 kW, and K09XK-D at 2.29 kW.

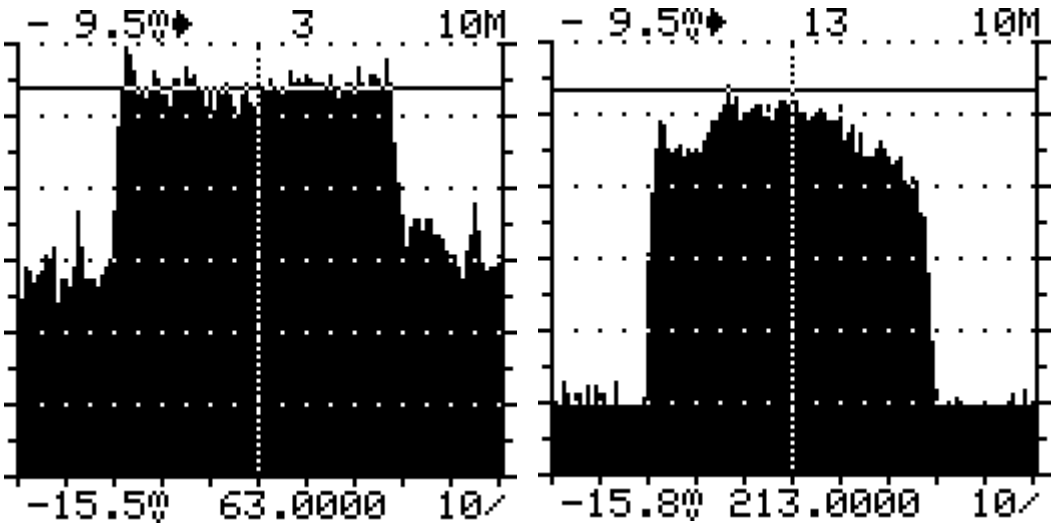
I hope the Commission seriously considers making the changes proposed here. While they will not solve all problems, these power cap increases would provide for significant flexibility in making VHF work for digital television, with the goal of making that band at least moderately more usable than it is now.

I thank the Commission for its time and consideration.

Sincerely,

Mark J. Colombo
RabbitEars Pseudonym: Trip Ericson

At left, capture of WBRA-3 using the Antennacraft Y5-2-6 with Radio Shack amplifier.
At right, capture of WSET-13 using the Antennacraft Y5-2-6 with Radio Shack amplifier.



Observe the difference in the noise floor at the left and right of the signals. Even though WBRA is obviously stronger and significantly cleaner, and the antenna is not even made for receiving upper VHF and is several degrees off-aim for WSET, one of my tuners tells me WBRA-3 has an SNR of around 23.5 dB while WSET-13 has an SNR of about 30.5 dB.